

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF

Matthew Stuckey
Chief
Permits Branch
Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue
Indianapolis, Indiana 46204

Dear Mr. Stuckey:

The U.S. Environmental Protection Agency has reviewed the draft prevention of significant deterioration and draft part 70 operating permit modification, permit number 107-32615-00038, for Nucor Steel, located in Crawfordsville, Indiana. To ensure that the source meets Federal Clean Air Act requirements, that the permit will provide necessary information so that the basis of the permit decision is transparent and readily accessible to the public, and that the permit record provides adequate support for the decision, EPA has the following comments:

- 1. The greenhouse gas (GHG) best available control technology (BACT) analysis considers only carbon dioxide (CO₂) and does not consider non-CO₂ GHGs because you assert that there are no known add-on controls for them (Appendix B, page 79). Although there may not be any known add-on controls at this time, the GHG BACT analysis should address these non-CO₂ GHG pollutants to the extent that they are emitted from the facility. Please explain whether the GHG emission rate limit determined as GHG BACT is sufficient to address the emissions of non-CO₂ GHGs.
- 2. Condition D.0.2 (permit, page 56) presents an equation that the Permittee must use to determine compliance with GHG BACT for the entire facility. The equation takes as its inputs the amount of CO₂ measured from a CO₂ continuous emission monitor, a mass balance of CO₂ in and out at the Castrip unit, and the amount each type of fuel used at the facility. The equation, as written, does not require a conversion from the amount of propane and #2 fuel oil used at the facility to the amount of carbon dioxide equivalents (CO₂e) emitted as a result of using these fuels. Please correct the equation to ensure that CO₂e is being added together within the equation. Please also clarify whether this equation accounts for all sources of non-CO₂ GHGs or otherwise explain how this is sufficient to ensure compliance with the GHG BACT.
- 3. The equation in Condition D.0.2 includes as part of its input the mass balance of carbon into the Castrip vacuum tank degasser and carbon out of the Castrip ladle metallurgy station. The permit does not have a condition requiring recordkeeping of the input and

- output of the Castrip unit in order to verify compliance with the GHG BACT requirements. Please add a condition to the permit requiring appropriate recordkeeping to ensure compliance with the GHG BACT.
- 4. Conditions D.4.2 through D.4.5 (permit, page 71) incorporate nitrogen oxide, carbon monoxide, and sulfur dioxide emission rates determined through BACT requirements. The permit currently does not require the Permittee to test, measure, or otherwise record the amount of these pollutants that are emitted from the baghouse stack. Please explain how compliance with these emission rate limits is determined and add appropriate testing, monitoring, and recordkeeping conditions to the permit to ensure compliance with the same.
- 5. On September 19, 2012, EPA published a final rule revising 40 C.F.R. 63 Subpart CCC. (See 77 FR 58251.) These revisions include changes to 40 C.F.R. §§ 63.1161, 63.1164, and 63.1165. Condition E.2.2 (permit, page 158) lists the requirements of 40 C.F.R. 63 Subpart CCC to which the facility is subject. However, this list refers to requirements that may no longer exist or may have changed. Please reexamine which conditions of 40 C.F.R. 63 Subpart CCC still apply to the facility and update attachment D to the permit as necessary to reflect the most recent changes to the rule.

We appreciate the opportunity to provide comments on this permit. If you have any questions, please feel free to contact Michael Langman at (312) 886-6867.

Sincerely,

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Air Permits Section